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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,450	02/18/2004	Steven Glassman		1770

7590 09/20/2007  
Steven P. Glassman  
21 Fay Court  
Marlboro, MA 01752

EXAMINER
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WALKER, KEITH D

ART UNIT	PAPER NUMBER
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1745

MAIL DATE	DELIVERY MODE
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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/781,450	Applicant(s) GLASSMAN, STEVEN	
	Examiner Keith Walker	Art Unit 1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 8, 9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-7 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Group III, Claims 4-7 & 10 in the reply filed on 6/29/07 is acknowledged.

Claims 1-11 are currently pending in the application with claims 1-3, 8, 9, & 11 withdrawn. Claims 4-7 & 10 are pending examination.

In the reply filed on 6/29/07 applicant did not show the status of the non-elected claims (e.g., withdrawn, cancelled). These claims are currently being treated as withdrawn. In response to this office action, applicant needs to acknowledge the status of claims 1-3, 8, 9, & 11.

### ***Information Disclosure Statement***

An Information Disclosure Statement has not been filed as of the writing of this office action.

### ***Drawings***

The drawings received on 2/18/04 are acceptable for examination purposes.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

1. Claims 4-7 & 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear under what conditions the operating parameters of pump are being claimed. Is the pump only capable of a maximum flow of

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less than 1 gal/min or only capable of drawing 2 amps? Does the pump only have these requirements when it is operating under certain circumstances?

Claims dependent on claims rejected under 35 U.S.C. 112 are also rejected for the same.

2. Claims 6 & 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what product applicant is claiming in these claims. The parent claim 5 is drawn to a battery cell but the preamble of claims 6 & 7 are drawn to a collection reservoir. It is unclear if applicant is intending to claim a separate statutory product drawn to a collection reservoir or to further limit the battery of claim 5. Claims 6 and 7 are being interpreted to be further limiting to the battery of claim 5.

***Claim Interpretation***

3. Claims 4-7 & 10 as currently claimed are drawn to a battery. The use of a pump with the battery and the limitations of the pump are not further limiting to the battery. If the system that comprises both the battery and pump are desired as the claimed product, then the preamble should read something like, "A battery cell system comprising ...". The claims will be interpreted to be the system giving weight to the pump.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-7 & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,340,667 (Stinson).

Stinson teaches a battery and electrolyte recirculation system that has a pump. A collection reservoir holds the electrolyte that is circulated by a pump through the top of the battery (Figs 1a-1c; 2:55-67). The collection reservoir has a one way check valve and a vent (Figs. 2 & 3; 3:10-20, 3:42-60).

Stinson is silent to the type of pump used.

Stinson teaches using the system with a vehicle (Fig. 4), which runs on a 12-volt dc system with a limited number of amps to operate all the controls of the vehicle. It would be obvious to one of ordinary skill in the art at the time of the invention to use a pump that also operates on a 12-volt dc system. In a similar manner it would be obvious to use a pump that draws as few amps as possible so the pump doesn't become a huge drain on the electrical system, which it is aiding to keep producing electricity. The flow requirements of the pump would be dictated by the load requirements and the size of the battery. Therefore it would be obvious to one skilled in the art to choose a pump that flows enough electrolyte to keep the battery operating in peak condition.

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Stinson is silent to the use of a safety switch that turns the pump on and off with the car ignition.

Since the pump is operated by the vehicle's power source, it would be obvious to use a switch that operates the pump in conjunction with the car's ignition.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Walker whose telephone number is 571-272-3458. The examiner can normally be reached on Mon. - Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

K. Walker

  
**PATRICK JOSEPH RYAN**  
**SUPERVISORY PATENT EXAMINER**